Apple-Cat II

Options & Accessories

The versatile APPLE-CAT II offers you a wide variety of operational options. The following options are only a few of many now available with this unique intelligent modem:

NOTE: As information is provided to Novation on software available for either the APPLE-CAT II or its accessories, we will include this data in our time-sharing service: call (213) 881-6880. This will provide you with rapid access to available programs.

(1)	Expansion Module	$39
(2)	Firmware ROM	$29
(3)	Cassette Recorder Option	$5
(4)	BSR Remote Control Option	$19
(5)	Touchtone Receiver Option	$99
(6)	Advanced Programming Information	(N/C)
(7)	Serial Printer Cable	$19
(8)	Pascal Driver Package	$10
(9)	Cat Remote, BSR Applications & Cat-Pack Software	(N/C)

(1) Expansion Module (P/N 490403)

FUNCTION: The Expansion Module provides you with a convenient access point connecting all APPLE-CAT II (required, and optional) equipment. This module is the primary "building block" for access to the APPLE-CAT's many unique options.

DESCRIPTION: The Expansion Module contains 6 connectors assembled on its (2⅛ x 2¾ x ½-inch) housing which is attached to the rear panel of the Apple II, utilizing double-sided tape provided by Novation. The unit is encased in a plastic housing and includes:

- (A) Telephone Line (modular jack)
- (B) Handset (modular jack)
- (C) Cassette Recorder MIC & Remote Control Connectors
- (D) BSR Transformer Connector
- (E) Off-Hook LED Indicator
- (F) Printer Port (EIA RS-232-C Connector)

NOTE: The Printer Port (Cinch DB-25S) connector allows you to print data received through the modem. Any "captured" data in the communications buffer can be sent to any serial RS-232 input printer. The port is NOT a substitute for the serial interface card which can be used with most Apple programs. The printer port is active only during COM-WARE II* operation.

*COM-WARE II is a Novation program on a diskette that changes your computer into a fully operational communicating terminal. The program takes full control of the computer and the APPLE-CAT II system and allows complete access to conventional DOS commands.

(2) Firmware ROM (P/N 490408)

FUNCTION: The firmware permits the user to write software applications for easy use of the APPLE-CAT II's functions with single character commands from the keyboard or from within a program.

DESCRIPTION: The Firmware ROM (2K) is an integrated circuit chip containing machine language routines. With the firmware in a terminal or phone mode the APPLE-CAT II has capabilities for remote control, cassette control, speech synthesizer connection, use as a serial port to printer (requires Expansion Module), and more. With the chip installed, Com-Ware is no longer necessary for modem operation.

NOTE: You may order the firmware by writing to Novation Sales and enclosing a $29.00 check with your request. Complete documentation provides instructions and sample programs.

(3) Cassette Recorder Option

FUNCTION: The Cassette Recorder Option allows you to interface your Apple computer to most standard cassette tape recorders.

DESCRIPTION: The Cassette Recorder Interconnect Cable (P/N 490406) plugs into the Expansion Module (P/N 490403) on one end and to a cassette recorder on the other. It is a 36-inch long shielded cable with standard mini jacks that provides the 'REM' and 'MIC' connections to the recorder.

Novation also provides you with a short Assembly Language Program to implement the recording function. The Program must be manually inserted into your computer.

NOTE: The Novation-supplied COM-WARE II program does not allow you to record voice. However, the Advanced Programming Information manual (SEE option (6) gives addresses of registers which control the ON/OFF selection of the recorder. This allows you to code your own recording programs.

REQUIREMENTS: Expansion Module (P/N 490403); Cassette Recorder Cable (P/N 490406); an Assembly Language Program; a standard cassette recorder.

(4) BSR Remote Control Option

FUNCTION: The BSR Remote Control Option allows you to operate lights, appliances, etc., in the home or office, by remote control. Using the system to its full limit you will be able to control up to 256 independently addressable modules.

DESCRIPTION: The BSR Remote Control Transformer (P/N 490405) is used as the interface from the APPLE-CAT to the AC power line. The 60 Hz AC line synchronizes the APPLE-CAT's 120KHz modulation signal to the power line. The 120KHz output is coupled through the transformer and the power lines in the building to activate lamp or appliance modules.

NOTE: Novation also supplies an Assembly Language Program, which is provided on the Basic COM-WARE disk and in hard copy, for implementing the BSR option. This program can serve as a model and resource for further software projects.

REQUIREMENTS: Expansion Module (P/N 490403); Assembly Language Program.

(5) Touchtone Receiver Option

FUNCTION: The TouchTone Receiver option allows the APPLE-CAT II to decode standard DTMF (Dual Tone Multi-Frequency) tones generated by touch tone telephones. For example, if you called someone, or answered an incoming voice call, the COM-WARE demo program will allow you to automatically decode the digits sent from the person you're talking to, and display the digits as they are received.

NOTE: You must provide your own programming for your specific applications. Novation's Advanced Programming Information manual, see (6) below, gives you sufficient information to allow you to write your own programs.

DESCRIPTION: The TouchTone Decoder (P/N 490407) consists of a Large Scale Integrated (LSI) circuit that plugs into a spare APPLE-CAT II board socket. The IC is designed to receive and decode the TouchTone (DTMF) frequencies and provide a hexadecimal output to the APPLE-CAT's processor circuitry. *The IC must be handled very carefully because of static electricity.*

NOTE: Novation provides you with a demo program on your COM-WARE disk that decodes and displays the corresponding digit(s) received on your monitor.

The APPLE-CAT COM-WARE diskette has the decode function program ready for use when the computer is put in the 'P' voice mode, and the TouchTone Receiver option is selected in the Re-Configure Mode. The TouchTone Decoder provides 1 of 12 outputs corresponding to the tones received. Novation provides you with programming information and a sample code listing to show you how this option works.

(6) Advanced Programming Information (API)

FUNCTION: The Advanced Programming Information machine language Manual (800155) gives you detailed register information necessary for you to write your own programs using APPLE-CAT II modems. It helps you implement all APPLE-CAT hardware functions.

DESCRIPTION: The manual includes information on I/O addresses, data and status byte locations of APPLE-CAT control features. The manual also includes Sample Assembly Language programs describing such sub-routines as dialing, picking up the phone, going into voice mode, data modes, etc.

(7) Serial Printer Cable

FUNCTION: The Serial Printer Cable (P/N 490411) provides access to the APPLE-CAT serial printer port. It is the only accessory you'll need IF you only want to implement the printout capability and have no intention of using the BSR or cassette recorder functions.

DESCRIPTION: The Serial Printer Cable is 4½ feet long and has a plastic 4-position connector (that mates with the APPLE-CAT expansion port), on one end, and a male EIA-RS-232-C connector (DB-25P type) on the other. It also has a plastic cord clip with adhesive backing. The printer port is only activated when the COM-WARE is booted up.

The connections between the APPLE-CAT II and the DB-25P are as follows:

EIA Conn.	Function
2	Receive Data (from peripheral)
3	Transmit Data (to peripheral)
7	Common
11 & 20	DTR—Busy Signal

NOTE: This option is not required if you have the interface Expansion Module P/N 490403.

(8) Pascal Driver Package (P/N 490416)

FUNCTION: The Pascal Driver Package provides easy access to the APPLE-CAT from Pascal programs by utilizing a "library" of Pascal routines.

DESCRIPTION: The Pascal Driver Package consists of:

(A) A 5-inch Diskette (floppy disk) that contains:
  (1) Object Code
  (2) Source Code (which allows modification and tailoring of programs)
(B) An Instruction Sheet

NOTE: You may order a Pascal Driver Package by writing to Novation Sales and enclosing a $10.00 check with your request for the Package.

(9) Cat Remote, BSR Applications & Cat Pack Software

NOTE: There is NO ADDITIONAL CHARGE to you from Novation for these items. They are all included on new releases of COM-WARE and DEAF-TERM diskettes.

FUNCTION: The CAT REMOTE allows you to operate your APPLE-CAT II under full DOS control, executing programs by remote control from your local terminal or computer.

BSR APPLICATIONS contain the basic BSR control driver plus a number of illustrative applications programs.

CAT PACK is a set of applications routines written in assembler which directly utilizes the features of the APPLE-CAT. Many of the same routines used in COM-WARE are included in CAT PACK.

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